

Recovery Plan Action Status

Plan Name: South Florida Multi-Species Recovery Plan (68 spp.)

Plan Status: Final

Plan Date: 18-May-99

Lead Agency: USFWS

Lead Office: South Florida Ecological Services Field Office

(772)
562-3909)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Beautiful pawpaw (Deeringothamnus pulchellus)	1	depu-h1.1	Secure beautiful pawpaw (Deeringothamnus pulchellus) habitat through acquisition, landowner agreements, and conservation easements.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Division of Forestry	Acquisition: General	Labor type not yet selected	Cost dependent upon specific site and amount of land acquired. Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-h1.2.1	Conduct prescribed burns.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Florida Division of Forestry, Water Management Districts	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost is per acre (ex. 0.6/acre); Total cost dependent upon number of acres burned. Action lead(s): FWC, FDEP, NGO, NPS, WMD, DOF, private
Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-h1.2.2	Control and eliminate exotic and invasive plants and animals.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, Private industry, landowners, etc.	Management: Predator and Competitor Control	Labor type not yet selected	Cost is per acre (ex. 1.0/acre); Total cost dependent upon number of acres infested with exotics. Action lead(s): FWC, FDEP, NPS, WMD, NGO
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-h1.2.3	Control access to areas where listed plants are growing.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, Private industry, landowners, etc.	Other: Law Enforcement, Other: Regulations	Labor type not yet selected	Action lead(s): FWC, FDEP, NGO

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Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-h2.1	Restore natural fire regime.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Florida Division of Forestry, Water Management Districts, Private industry, landowners, etc.	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost is per acre (ex. 0.6/acre); Total cost dependent upon number of acres burned. Action lead(s): FWC, FDEP, NGO, NPS, WMD, DOF, private
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-h2.2	Enhance sites with native plant species.	Unknown			Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost is per acre (ex. 5.0/acre); Total cost dependent upon number of acres restored. Action lead(s): FWC, FDEP, NPS, WMD, NGO
Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-h3.0	Continue habitat level research projects.	Not Started			Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Public and private universities	Research: Habitat Requirements	Labor type not yet selected	Action lead(s): universities
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-h4.0	Monitor habitat/ecological processes.	Not Started			Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Public and private universities	Research: Habitat Requirements	Labor type not yet selected	Action lead(s): FWC, FDEP, NGO, universities
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-h5.0	Provide public information about pine flatwoods and vegetative communities and their unique biota.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Florida Division of Forestry, Private industry, landowners, etc.	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS

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Beautiful pawpaw (Deeringothamnus pulchellus)	1	depu-s1.1.1	Continue surveys in Lee and Charlotte Counties.	Complete	FY 2006	FY 2007	Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Water Management Districts, South Florida counties, Institute for Regional Conservation	Research: Population Surveys	Contract	Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	1	depu-s1.1.2	Continue surveys on protected lands.	Complete	FY 2006	FY 2007	Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Water Management Districts, South Florida counties, Institute for Regional Conservation	Research: Population Surveys	Contract	Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s1.2	Maintain information on depu and its habitat in GIS database.	Not Started			U.S. Geological Survey, Florida Department of Environmental Protection, South Florida counties	Research: Population Surveys	Labor type not yet selected	Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	1	depu-s2.1	Acquire or protect habitat through acquisition, conservation easements, or agreements with landowners.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Non-governmental organizations, Florida Division of Forestry, Florida Department of Agriculture and Consumer Services, Water Management Districts	Acquisition: General	Labor type not yet selected	Cost dependent upon specific site and amount of land acquired. Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	1	depu-s2.2	Protect populations on public lands.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Division of Forestry, Florida Department of Agriculture and Consumer Services	Other: Law Enforcement, Other: Regulations	Labor type not yet selected	Action lead(s): FWS

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Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-s2.3	Use local or regional planning to protect habitat.	Ongoing Current	FY 1995 - FY 1999		Local Governments, South Florida counties	Other: Administration	Labor type not yet selected	Cost included in standard operating procedures of county's budget. Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-s2.4.1	Initiate section 7 consultation when applicable.	Ongoing Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Department of Agriculture, U.S. Geological Survey, Biological Resources Division, U.S. Federal Emergency Management Agency, U.S. Geological Survey, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Natural Resources Conservation Service, United States Coast Guard, U.S. Air Force, US Forest Service	Other: Regulations	Labor type not yet selected	Cost included in standard operating procedures of Federal agency's budget. Action lead(s): All Federal agencies
Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-s2.4.2	Enforce take and trade prohibitions.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Agriculture and Consumer Services/Division of Plant Industry	Other: Law Enforcement	Labor type not yet selected	Cost dependent upon specific situation. Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-s2.5	Develop an ex situ collection.	Ongoing Current	FY 1995 - FY 1999		Non-governmental organizations, Private industry, landowners, etc.	Management: Propagation	Labor type not yet selected	Action lead(s): NGO
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s2.6.1	Establish protocol for reintroduction.	Ongoing Current	FY 1995 - FY 1999		Non-governmental organizations, Private industry, landowners, etc.	Research: Reintroduction	Labor type not yet selected	Action lead(s): NGO
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s2.6.2	Locate potential (re)introduction sites.	Not Started			U.S. Army Corps of Engineers, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, Private industry, landowners, etc.	Research: Reintroduction	Labor type not yet selected	Action lead(s): NGO

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Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s2.6.3	(Re)introduce plants to protected sites.	Ongoing Not Current	FY 1995 - FY 1999		U.S. Army Corps of Engineers, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, Private industry, landowners, etc.	Management: Reintroduction	Labor type not yet selected	Action lead(s): NGO
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s3.1	Conduct research to determine demographic information.	Not Started			Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Public and private universities	Research: Demographic Studies	Labor type not yet selected	Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s3.2	Conduct population viability and risk assessment analysis.	Not Started			Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Public and private universities	Research: Population Assessment	Labor type not yet selected	Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-s3.3	Conduct research to assess management requirements of depu.	Not Started			Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Public and private universities	Research: Management Techniques	Labor type not yet selected	Action lead(s): universities
Beautiful pawpaw (Deeringothamnus pulchellus)	2	depu-s3.4	Assess feasibility of relocation and obtain information on techniques and survival.	Ongoing Not Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Private industry, landowners, etc., Public and private universities	Research: Reintroduction	Labor type not yet selected	Action lead(s): NGO

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Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s4.1.1	Monitor to detect changes in demographic characteristics.	Not Started			Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Public and private universities	Research: Demographic Studies	Labor type not yet selected	Action lead(s): FWS
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s4.1.2	Monitor the effects of land management actions on depu.	Not Started			Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Public and private universities	Research: Management Techniques	Labor type not yet selected	Action lead(s): FWC, NPS, FDEP
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s4.2	Develop a quantitative description of the population structure.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Public and private universities	Research: Population Surveys	Labor type not yet selected	Action lead(s): universities
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s4.3	Monitor reintroduced plants.	Ongoing Not Current	FY 1995 - FY 1999		U.S. Army Corps of Engineers, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, South Florida counties, Private industry, landowners, etc.	Research: Reintroduction	Labor type not yet selected	Action lead(s): NGO
Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s5.0	Provide information about depu to the public.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Florida Division of Forestry, South Florida counties, Private industry, landowners, etc.	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS

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Beautiful pawpaw (Deeringothamnus pulchellus)	3	depu-s6.0	Establish de-listing criteria.	Not Started			Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Public and private universities	Other: Administration	Internal Administrative	Action lead(s): FWS